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EXAMINER

YOON, TAE H

ART UNIT

PAPER NUMBER

1714

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17

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/18/98 985

Applicant(s)

Hourguebie et al

Examiner

T. Yoon

Group &amp; Unit

1714

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

☒ Responsive to communication(s) filed on 1-17-03

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

☒ Claim(s) 1-14, 16 and 18 is/are pending in the application.

Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-14, 16 and 18 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement

## Application Papers

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).

☒ All ☐ Some ☐ None of the:

☐ Certified copies of the priority documents have been received.

☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

☒ Copies of the certified copies of the priority documents have been received

in this national stage application from the International Bureau (PCT Rule 17.2(a))

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Reference(s) Cited, PTO-892

☐ Notice of Informal Patent Application, PTO-152

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Other \_\_\_\_\_

Office Action Summary

Art Unit: 1714

Again, the French in drawings is objected.

A comma (,) is needed after "vinyl resins" in line 3 of claim 11.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-14, 16 and 18 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims and specification recite "whose heterogeneity on a scale of 0.1  $\mu\text{m}$  or less, as observed under scanning electron micrography (SEM)". The recited fine resolution of SEM is dependent on the magnification power of said SEM (the higher the magnification, the finer (better) the resolution). However, the specification failed to describe adequately how to measure such resolution or heterogeneity size.

With respect to the recited "heterogeneity", applicant asserts that one skilled in the art understand that the sample in question would appear homogenous when viewed at a 0.1  $\mu\text{m}$  scale. However, said heterogeneity on a 0.1  $\mu\text{m}$  scale is dependent on the magnification power of SEM. Thus, the specification failed to describe adequately how said heterogeneity has been measured (magnification power). Applicant also states that the sample would display increasing

Art Unit: 1714

heterogeneity if viewed at much higher magnification which actually supports the examiner's position. For example, 1,000X would not show heterogeneity, but 100,000X would show heterogeneity. Thus, the particular basis, magnification power of SEM, is needed to judge said heterogeneity.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-14, 16 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recited "whose heterogeneity on a scale of 0.1  $\mu\text{m}$  or less, as observed under scanning electron micrography (SEM)" is indefinite absent a particular method or magnification. See also above.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 1714

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9-11, 14, 16 and 18 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Conn et al (WO 96/21694).

The rejection is maintained for reason of record and following.

The instant preamble "insulating material" has little probative value <sup>b</sup>asent a particular conductivity or any definition thereof since since said "insulating material" and "semi-conducting composite" of Conn et al are defined by users. The amount of a conducting material taught by Conn et al (1,000-5,000 ppm in 1,000-200,000 ppm) falls within the scope of the instant invention. Applicant points Figures of Conn et al, however, a viewing of said Figures at much lower magnification power would meet the instant claim absent a particular magnification power of SEM used in the invention (see also above response to 112, 1st pp rejection). Also, a viewing of said figure at 1000X (a scale of 1  $\mu$ m instead of 100  $\mu$ m for the inserted scale bar) would yield the instant heterogeneity since the one of the big light colored portions or islands (or dark colored portions) would fill the entire figure or picture with a homogeneity. Applicant failed to show the composite of Conn et al differs from that of the instant invention. Also, the recited preamble,

Art Unit: 1714

“improved resistance to thermal ageing”, has little probative value, and/or the composite of Conn et al inherently possesses said property.

Any non-crystalline (amorphous) polymer particle inherently permit some impregnation of a solution as in the instant example since said particle possesses micropores and Conn et al teach said amorphous polymer in claim 4. The instant specification does not teach positively that the insulating polymer is porous which permits an impregnation, and only teaching is insulating polymer granules which are taught by Conn et al.

Claims 1-9, 11-14, 16 and 18 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Han et al (US 5,254,633).

Rejection is maintained for reason of record and following.

First, Han et al clearly teach employing 0.1 wt% (1,000 ppm) conductive polymer at col. 2, lines 40-44, and thus Conn et al is not needed to reject claims 1-9 (as in the final rejection) reciting an amount of a conducting polymer. Han et al also teach the use of smaller amounts of the conductive polymer when lower electrical conductivity is required at col. 4, lines 24-33. Thus, Han et al teach various amounts of the conductive polymer depending on the desired conductivity.

Second, any non-crystalline (amorphous) polymer particle inherently permit some impregnation of a solution as in the instant example since said particle possesses micropores and Han et al teach the same polymers claimed in the instant invention. The instant specification does

Art Unit: 1714

not teach positively that the insulating polymer is porous which permits an impregnation, and only teaching is insulating polymer granules which are taught by Han et al. Therefore, said impregnation while coating is an inherent step.

Third, Han et al teach various applications at col. 31 as pointed out applicant. A homogeneous mixing of the composition of Han et al is an inherent and/or obvious since the fabrication of articles such as housing, shields or connectors would require a melt extrusion which yields said homogeneous mixing.

See above under the response to Conn et al. Contrary to applicant's assertion, Han et al teach that particles may also be relatively small for example  $10^{-18}$  cm<sup>3</sup> in volume or smaller at col. 5, lines 20-21 which would yield  $10^{-6}$  cm (0.01  $\mu$ m). The intended use, insulation, has little probative value.

With respect to the higher amount of conducting material use in the example, note that reference must be considered for all that it discloses and must not be limited to its preferred embodiments or working examples. *In re Mills*, 477 F2d 649, 176 USPQ 196 (CCPA), and Han et al clearly teach employing 0.1 wt% (1,000 ppm) conductive polymer at col. 2, lines 40-44.

The recited improved resistance to thermal ageing is an inherent property since the composition of Han et al conducts an electrical current and thus releases thermal stress since said electrical current yields a thermal stress as in the instant invention. Applicant failed to show otherwise.

Art Unit: 1714

Applicant assert that applicant's materials could not be used in devices taught by Han et al since they do not have the required minimum conductivity, but said assertion has little probative value since the intended use has no probative value and since the instant claims do not recite any conductivity of the material. The applicant's argument is directed towards the intended use of the instantly claimed composition. The instant claims are directed towards a composition, not its intended use. The composition is defined solely by its ingredients and the amounts thereof. The instant recitation of the intended use of the composition does nothing to further define the composition to one of ordinary skill in the art. The US Patent and Trademark Office cannot patent claims directed towards a composition which is not novel or is obvious only because the inventor has found a novel use for the composition. See *In re Pearson*, 494 F. 2d 1399, 181 USPQ 641 (CCPA 1974).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H. Yoon whose telephone number is (703) 308-2389. The examiner can normally be reached on Monday to Thursday from 8:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on (703) 306-2777. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

THY/February 6, 2003



TAE H. YOON  
EXAMINER